SONY

3-097-566-**11**(1)

LCD Digital Color TV

Operating Instructions

BRAVIA

KDL-70XBR3

XBR

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Owner's Record

The model and serial numbers are located at the rear of the TV. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____

Serial No. _____

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

CAUTION

To prevent electric shock, do not use this polarized AC plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Declaration of Conformity

Trade Name: SONY
Model: KDL-70XBR3
Responsible Party: Sony Electronics Inc.
Address: 16530 Via Esprillo,
San Diego, CA 92127 U.S.A.
Telephone Number: 858-942-2230

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTIFICATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ☐ Reorient or relocate the receiving antenna.
- ☐ Increase the separation between the equipment and receiver.
- ☐ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ☐ Consult the dealer or an experienced radio/TV technician for help.

Pursuant to FCC regulations, you are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For Customers in Canada

This Class B digital apparatus complies with Canadian ICES-003.

Safety

- ☐ Operate the TV only on 120 V AC.
- ☐ Use the AC power cord specified by Sony and suitable for the voltage where you use it.
- ☐ The plug is designed, for safety purposes, to fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- ☐ If any liquid or solid object should fall inside the cabinet, unplug the TV immediately and have it checked by qualified service personnel before operating it further.
- ☐ If you will not be using the TV for several days, disconnect the power by pulling the plug itself. Never pull on the cord.
- ☐ For details concerning safety precautions, see "Important Safety Instructions" on page 4.

Installing

- ☐ The TV should be installed near an easily accessible power outlet.
- ☐ To prevent internal heat buildup, do not block the ventilation openings.
- ☐ Do not install the TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- ☐ Avoid operating the TV at temperatures below 41°F (5°C).
- ☐ If the TV is transported directly from a cold to a warm location, or if the room temperature changes suddenly, the picture may be blurred or show poor color due to moisture condensation. In this case, please wait a few hours to let the moisture evaporate before turning on the TV.
- ☐ To obtain the best picture, do not expose the screen to direct illumination or direct sunlight. It is recommended to use spot lighting directed down from the ceiling or to cover the windows that face the screen with opaque drapery. It is desirable to install the TV in a room where the floor and walls are not of a reflective material.

CAUTION

Use the following Sony appliance(s) only with the following WALL-MOUNT BRACKET.

	Sony Appliance Model No.
Sony Wall-Mount Bracket Model No.	SU-WL500

Use with other WALL-MOUNT BRACKET may cause instability and possibly result in injury.

To Customers

Sufficient expertise is required for installing the specified product. Be sure to subcontract the installation to Sony dealers or licensed contractors and pay adequate attention to safety during the installation.

Note

This television includes a QAM demodulator which should allow you to receive unscrambled digital cable television programming via subscription service to a cable service provider. Availability of digital cable television programming in your area depends on the type of programming and signal provided by your cable service provider.

Trademark Information

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Manufactured under license from BBE Sound, Inc.
Licensed by BBE Sound, Inc. under one or more of the following US patents: 5510752, 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.

Macintosh is a trademark licensed to Apple Computer, Inc., registered in the U.S.A and other countries.

Blu-ray Disc is a trademark.

“BRAVIA” and BRAVIA are trademarks of Sony Corporation.

This TV incorporates High-Definition Multimedia Interface (HDMI™) technology. HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

“x.v.Color” is a trademark of Sony Corporation.

Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

USE

AC power cord

Observe the followings to prevent the AC power cord being damaged. If the AC power cord is damaged, it may result in a fire or an electric shock. Stop using it and ask your dealer or Sony service center to exchange it.

- ☐ Do not place the TV where the power cord is subject to wear or abuse.
- ☐ Do not pinch, bend, or twist the cord excessively. The core lines may be bared and cut, and cause a short-circuit, resulting in a fire or an electric shock.
- ☐ Do not convert or damage the power cord.
- ☐ Do not allow anything to rest on or roll over the power cord.
- ☐ Do not move the TV with the power cord plugged in.
- ☐ Keep the power cord away from heat sources.
- ☐ When you disconnect the AC power cord, disconnect it from the wall outlet first.
- ☐ Be sure to grasp the plug when disconnecting the power cord. Do not

Optional equipment

Do not install optional components too close to the TV set. Picture distortion and/or noisy sound may occur if the TV set is positioned in close proximity to any equipment emitting electromagnetic radiation.

Small accessories removal and fittable

Keep small accessories out of children's reach.

ANTENNAS

Outdoor antenna grounding

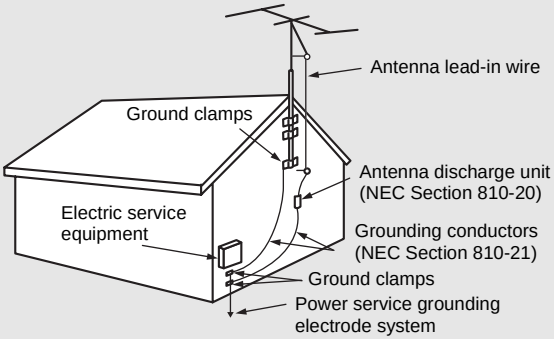
If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

Section 810 of the National Electrical Code (NEC) in U.S.A. and Section 54 of the Canadian Electrical Code in Canada provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Antenna grounding according to the National Electrical Code, ANSI/NFPA 70



NEC: National Electrical Code

BATTERIES

- ☐ Do not dispose of batteries in a fire.
- ☐ Do not short circuit, disassemble or overheat the batteries.
- ☐ Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

Disposal of used batteries

To preserve our environment, dispose of used batteries according to your local laws or regulations.

CLEANING

Cleaning the AC power plug

Unplug the AC power plug and clean it regularly. If the plug is covered with dust and it picks up moisture, its insulation may deteriorate and result in a fire.

Cleaning the screen surface/ cabinet of the TV set

Unplug the AC power cord when cleaning this TV. If not, it may result in electric shock. Clean the cabinet of the TV with a dry soft cloth. To remove dust from the screen, wipe it gently with a soft cloth. Stubborn stains may be removed with a cloth slightly dampened with a solution of mild soap and warm water. Never use strong solvents such as thinner or benzine for cleaning. If using a chemically pretreated cloth, please follow the instruction provided on the package. The ventilation holes can accumulate dust over time. To ensure proper ventilation, we recommend removing the dust periodically (once a month) using a vacuum cleaner.

MAGNETIC INFLUENCE

This TV contains a strong magnet in the speaker unit that generates a magnetic field. Keep any items susceptible to magnetic fields away from the speaker.

SOUND

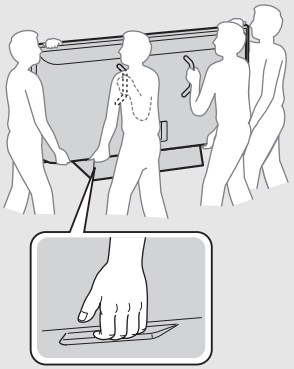
If a snapping or popping sound from the TV is continuous or frequent while the TV is operating, unplug the TV and consult your dealer or service technician. It is normal for some TV's to make occasional snapping or popping sounds, particularly when being turned on or off.

CARRYING THE TV

Carrying the TV in the specified manner

To avoid dropping the TV and causing serious injury, be sure to follow these guidelines:

- ☐ Before carrying the TV set, disconnect all cables.
- ☐ Carrying this TV set requires at least four people.
- ☐ When you carry the TV set, place your hand as illustrated and hold it securely. Do not put stress on the LCD panel and the frame around the screen.
- ☐ When lifting or moving the TV set, hold it firmly from the bottom. Two people who carry the center position of the TV at the rear side, hold the handles at the rear of the TV.
- ☐ When carrying the TV set, do not subject it to shocks or vibration, or excessive force.



(Continued)

VENTILATION

The slots and openings in the TV are provided for necessary ventilation. To ensure reliable operation of the TV, and to protect it from overheating, these slots and openings must never be blocked or covered.

Unless proper ventilation is provided, the TV may gather dust and get dirty. For proper ventilation, observe the following:

- ☐ Do not install the TV face up or down or sideways.
- ☐ Do not install the TV turned over or upside down.
- ☐ Never cover the slots and openings with a cloth or other materials.

- ☐ Never block the slots and openings by placing the TV on a bed, sofa, rug or other similar surface.

- ☐ Never place the TV in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.

Objects and ventilation holes

Never push objects of any kind into the TV through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or an electric shock. Do not place any objects on the TV.

MOISTURE

Moisture and flammable objects

- ☐ Do not use power-line operated sets near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc. It may result in a fire or an electric shock.
- ☐ Do not let this TV get wet. Never spill liquid of any kind on the TV. If any liquid or solid object does fall through, do not operate the TV. It may result in electric shock or damage to the TV. Have it checked immediately by qualified personnel.
- ☐ The TV shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the TV.
- ☐ To prevent fire, keep flammable objects or open flame (e.g. candles) away from the TV.

INSTALLATION

Wall mount installation requires the use of a Wall-Mount Bracket. When installing or removing, using the Wall-Mount Bracket, be sure to use qualified contractors. If not properly secured during installation or removal from the Wall-Mount Bracket, the TV may fall and cause serious injury.

Optional wall mount

Observe the following when installing the TV using a Wall-Mount Bracket.

- ☐ Be sure to follow the operating instructions supplied with the Wall-Mount Bracket when installing the TV.
- ☐ Be sure to attach the brackets supplied with the Wall-Mount Bracket.
- ☐ Do not hang the TV from the ceiling. It may fall and cause serious injury.

Placement

The TV should be installed near an easily accessible AC power outlet.

Observe the following in placing the TV. Otherwise the TV may fall from the stand or wall mount, causing damage or serious injury.

- ☐ Place the TV on a stable, level surface.
- ☐ Do not hang anything on the TV. Do not allow children to climb on the TV.

Do not install the TV in places subject to extreme temperature, for example in direct sunlight, or near a radiator, or heating vent. If the TV is exposed to extreme temperature, the TV may overheat and cause deformation of the casing or cause the TV to malfunction. Do not install the TV in a place exposed to direct air conditioning. If the TV is installed in such a location, moisture may condense inside and may cause a malfunction.

- ☐ Never place the TV in hot, oily, humid or excessively dusty places.
- ☐ Do not install the TV where insects may enter.
- ☐ Do not install the TV where it may be exposed to mechanical vibration.
- ☐ Do not install the TV in a location where it may protrude, such as on or behind a pillar, or where you might bump your head on it. Otherwise, it may result in injury.

Preventing the TV from toppling over

Take measures to prevent the unit from toppling over and causing injury. To prevent the unit from toppling over, secure the unit to a wall or pillar.

Placement for viewing

It is recommended to watch the TV at a distance of 3 - 7 times that of the screen height, and in moderate brightness. Watching the TV for too long or in a dark room may cause eye fatigue. To obtain a clear picture, do not expose the screen to direct illumination or direct sunlight. If possible, use spot lighting directed down from the ceiling.

Outdoor use

Do not install this TV outdoors. If the TV is exposed to rain, it may result in a fire or an electric shock. If the TV is exposed to direct sunlight, the TV may heat up and cause damage to the TV.

Vehicle, ships and other vessels

Do not install this TV in a vehicle.

Bumping of the vehicle may cause the TV to fall down and cause injury.

Do not install this TV in a ship or vessel. If the TV is exposed to seawater, it may cause a fire or damage the TV.

Medical institutions

Do not place this TV in a place where medical equipment is in use.

It may cause a malfunction of medical instruments.

VOLUME ADJUSTMENT

- ☐ Adjust the volume so as not to trouble your neighbors. Sound carries very easily at night. Therefore, closing the windows or using headphones is suggested.
- ☐ When using headphones, adjust the volume so as to avoid excessive levels, as hearing damage may result.

LCD SCREEN

- ☐ Although the LCD screen is made with high-precision technology and has effective pixels of 99.99% or more, black dots or bright points of light (red, blue, or green) may appear constantly on the LCD screen. This is a structural property of the LCD panel and is not a malfunction.
- ☐ Do not expose the LCD screen surface to direct sun light. Doing so may damage the LCD panel.
- ☐ Do not push or scratch the LCD screen, or place objects on top of the TV. The image may be uneven or the LCD panel may be damaged.
- ☐ If the TV is used in a cold place, a smear may occur in the picture or the picture may become dark. This does not indicate a failure. These phenomenon improve as the temperature rises.
- ☐ Ghosting may occur when still pictures are displayed continuously. It should disappear after a few moments.
- ☐ The screen and cabinet get warm when the TV is in use. This is not a malfunction.
- ☐ Avoid spraying insect repellent with volatile material on the screen.
- ☐ Avoid prolonged contact with rubber or plastic made material.

Broken pieces

Do not throw anything at the TV.
The screen glass may break by the impact and cause serious injury.

If the surface of the TV cracks, do not touch it until you have unplugged the AC power cord.

Otherwise electric shock may result.

(Continued)

Handling of broken glass and liquid crystal leakage

If the LCD panel gets damaged, crystalline liquid leakage may occur, or scattered broken glass may result. Do not touch broken glass or crystalline liquid (which is toxic), with bare hands as cuts or poisoning/skin irritation may occur. Also, do not let glass fragments or leaked crystalline liquid get into your eyes or mouth. Should either contact your eyes or mouth, rinse the contacted area thoroughly with water and consult your doctor.

SERVICING

Servicing

Do not attempt to service the TV yourself since opening the cabinet may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Replacement parts

When replacement parts are required, be sure the service technician certifies in writing that he/she has used replacement parts specified by the manufacturer that have the same characteristics as the original parts.

Unauthorized substitutions may result in a fire, an electric shock or other hazards.

Safety check

Upon completion of any service or repairs to the unit, ask the service technician to perform routine safety checks (as specified by the manufacturer) to determine that the unit is in safe operating condition, and to so certify. Ask a qualified service technician to dispose of the unit.

DISPOSAL OF THE TV

- ☐ Do not dispose of the TV with general household waste.
- ☐ The LCD contains a small amount of liquid crystal. The fluorescent tube used in this display also contains mercury. Follow your local ordinances and regulations for disposal.

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Welcome to the World of BRAVIA™

Thank you for purchasing this Sony LCD Digital Color Television. This manual is for model KDL-70XBR3. The packing box contains accessories (see “Supplied accessories” on page 52).

For optimum picture performance, your new BRAVIA TV is capable of receiving high definition programming through its integrated tuner. It is also capable of receiving HDTV content from a cable or satellite box via the video inputs (HDMI and Y/PB/PR component video; see page 11).

Connecting the TV

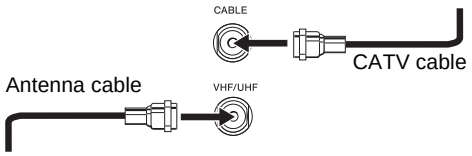
To display clear, crisp pictures, your TV must be connected properly. To properly connect your TV, follow the basic connections provided in this section. Advanced connection examples are provided in the separate Quick Setup Guide accompanied with your TV. The Quick Setup Guide provides a variety of optional equipment connection diagrams.

It is strongly recommended that you connect the antenna/cable input using the supplied 75-ohm coaxial cable to receive optimum picture quality. A 300-ohm twin lead cable can be easily affected by radio frequency, resulting in signal deterioration.

When the antenna/cable connection is done, you must perform an Initial Setup so your TV will create a list of channels you can view (see page 19). After you can receive and view programming you should select the proper Wide Mode setting to display the picture in your preferred aspect ratio. See “Changing the Wide Screen Mode” on page 23.

Cable System and VHF/UHF Antenna System

Connecting a cable system to the CABLE input or an external VHF/UHF antenna to the VHF/UHF input will allow you to enjoy high definition and standard definition digital programming (if available in your area) along with the standard definition analog programming.

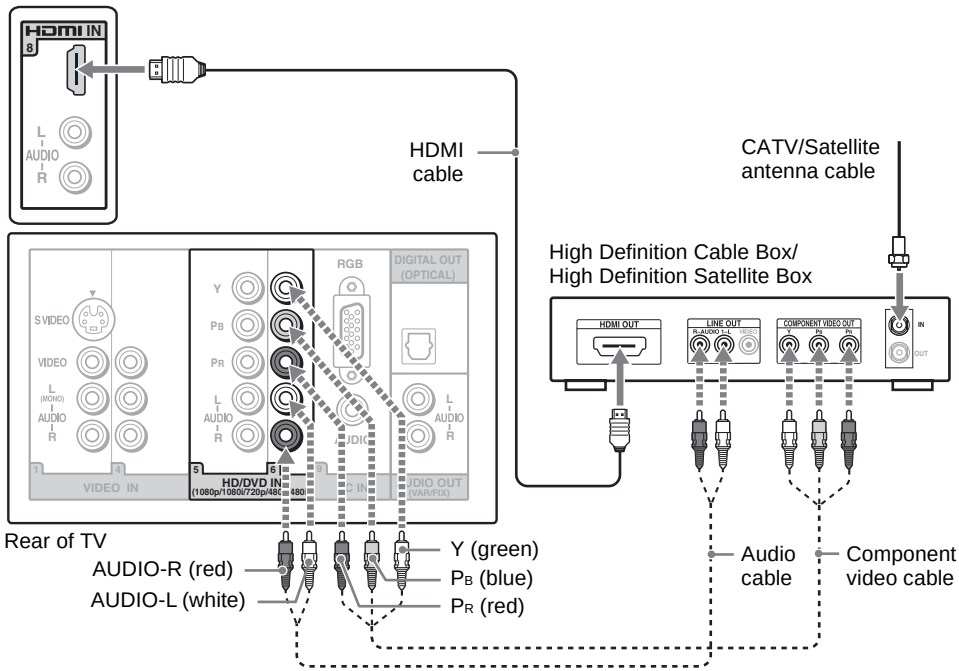


✍ This TV is capable of receiving unscrambled digital programming for both cable (QAM and 8VSB) and external VHF/UHF antenna (ATSC).

✍ Press ANT to switch between VHF/UHF and cable.

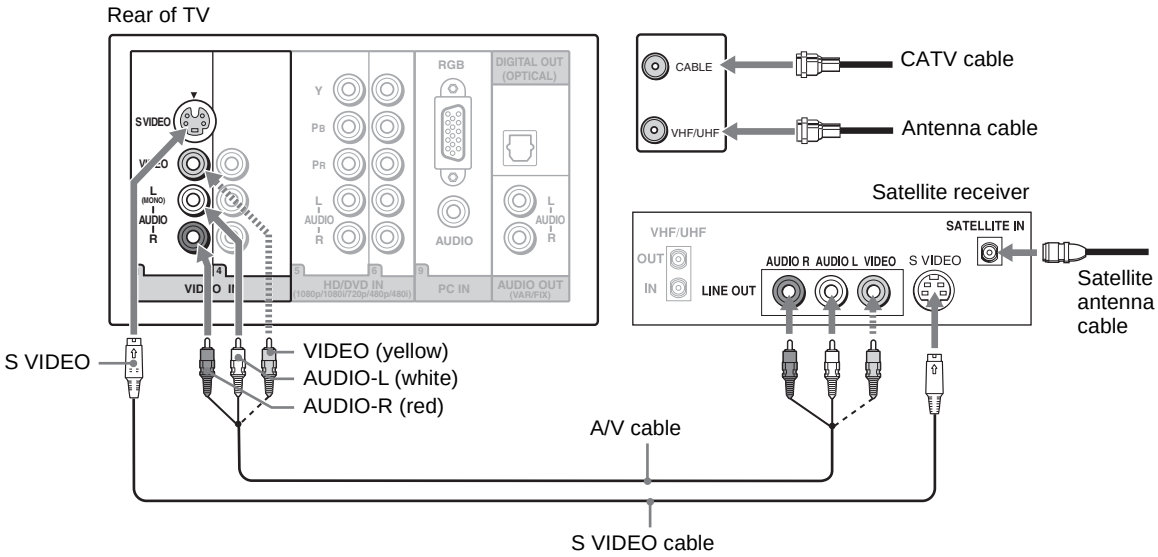
HD Cable Box/ HD Satellite Box

You can also enjoy high definition programming by subscribing to high definition cable service or high definition satellite service. For the best possible picture, make sure you connect these components to your TV via the HDMI or component video (with audio) input on the back of your TV.



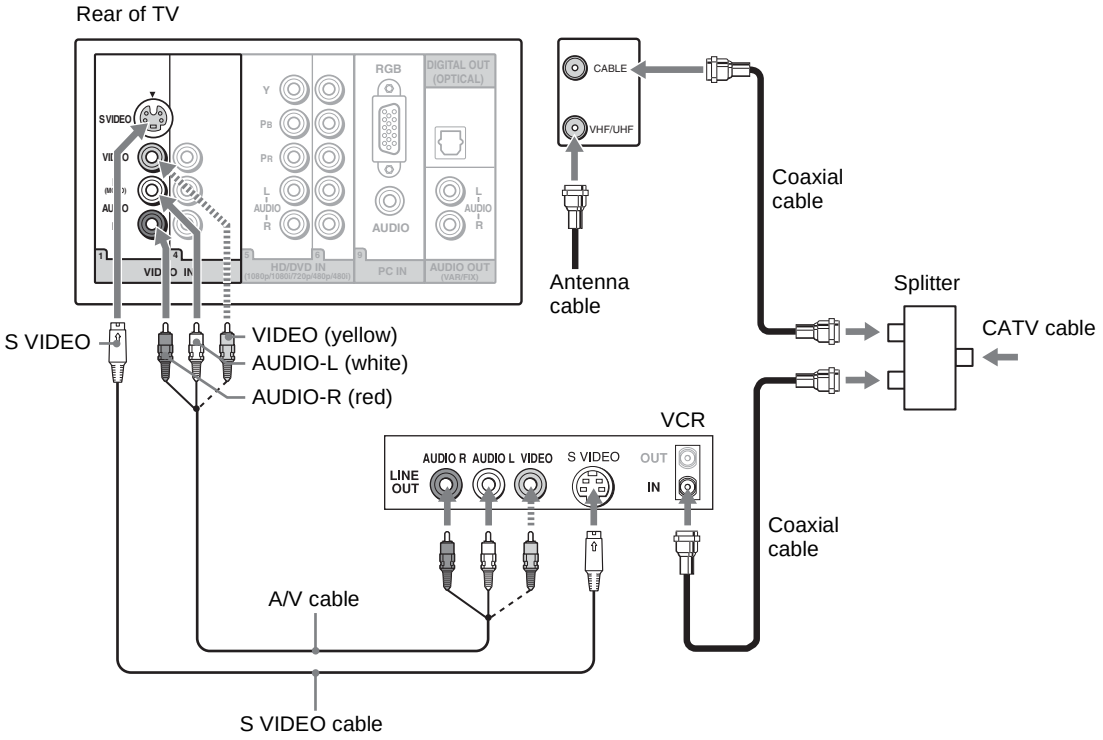
✍ Component video (Y, P_B, P_R) or HDMI connection is necessary to view 480i, 480p, 720p, 1080i, and 1080p (except for HDMI IN 3) formats. Note that this TV displays all format types of picture in its native resolution of 1,920 dots × 1,080 lines.

Satellite Receiver and Cable/Antenna



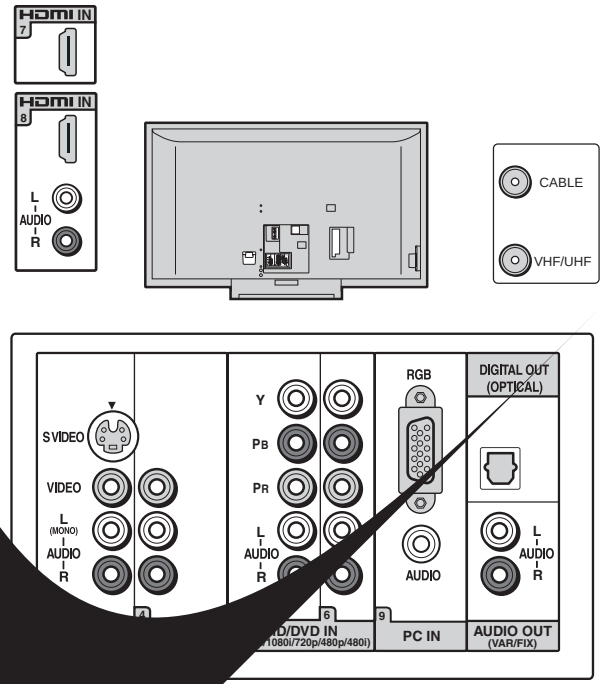
✍ If your satellite receiver is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

VCR, Cable and Antenna



✍ If your VCR is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

When C ing to Optional Equipment



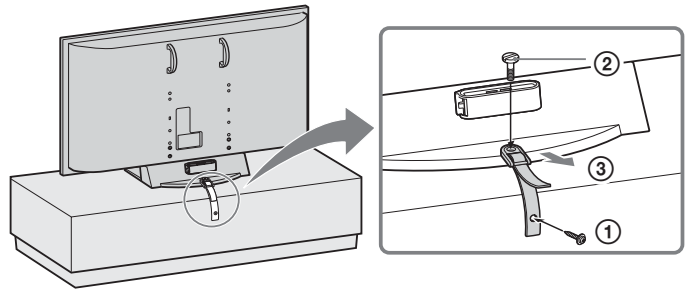
Item		Description
		 HDMI-to-DVI cable HDMI adapter Audio cable ✍ Be sure to use only an HDMI cable that bears the HDMI logo. ✍ Do not connect a PC to the TV's HDMI input. Use the PC IN (RGB IN) input instead when connecting a PC. ✍ HDMI connection is necessary to view 480i, 480p, 720p, 1080i and 1080p (except for HDMI IN 3) formats. Note that this TV displays all format types of picture in a resolution of 1,920 dots × 1,080 lines.
5	AC IN	Connects the supplied AC power cord.
6	VIDEO IN 1 S VIDEO	Connects to the S VIDEO output jack of your VCR or other video equipment that has S VIDEO. S VIDEO provides better picture quality than composite video (7).
7	VIDEO IN 1/4 VIDEO/L(MONO)-AUDIO-R	Connect to the composite video and audio output jacks on your A/V equipment such as a VCR or other video equipment. A third composite video and audio jacks (VIDEO 2) is located on the left side of the TV.
8	HD/DVD IN 5/6 (1080p/1080i/720p 480p/480i)/ L-AUDIO-R	Connect to your equipment's component video (YP_BP_R) and audio (L/R) jacks. Component video provides better picture quality than the S VIDEO (6) or the composite video (7) connections. ✍ Component video (YP_BP_R) connection is necessary to view 480i, 480p, 720p, 1080i and 1080p formats. Note that this TV displays all format types of picture in a resolution of 1,920 dots × 1,080 lines.
9	PC IN 9 (RGB/AUDIO)	Connect to a personal computer's video output connector using HD15-HD15 cable (analog RGB, supplied). Can also be connected to other analog RGB devices. See "PC Input Signal Reference Chart" on page 51 for the signals that can be displayed. ✍ For some Apple Macintosh computers, it may be necessary to use an adapter (not supplied). If this is the case, connect the adapter to the computer before connecting the HD15-HD15 cable. ✍ If the picture is noisy, flickering or not clear, adjust Phase and Pitch of PC Settings as described on page 47.
10	AUDIO OUT (VAR/FIX)	Connect to the left and right audio input jacks of your audio or video equipment. You can use these outputs to listen to your TV's audio through your stereo system. For details, see page 36.
11	DIGITAL OUT (OPTICAL)	Connects to the optical audio input of digital audio equipment that is PCM/Dolby* digital compatible. (DIGITAL OUT (OPTICAL) is only available for digital channels.)
12	VHF/UHF	Connects to your VHF/UHF antenna.
13	CABLE	Connects to your cable signal. ✍ VHF/UHF input receives over-the-air broadcast signal frequencies and CABLE input receives CATV signal frequencies. ✍ Press ANT to switch between VHF/UHF and cable.

* Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

Installing the TV

Preventing the TV from Toppling Over

1 Attaching the Support Belt.



① Screw the support belt (supplied) to the TV stand with a wood screw (supplied).

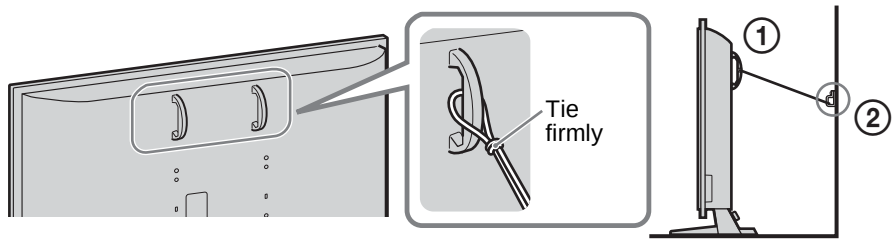
② Attach the support belt to the stand with the securing screw (supplied) using a coin, etc.

③ Adjust the length by pulling the support belt toward you while holding the TV stand.

✍ Be sure to take measures to prevent the TV from toppling over and causing injury.

✍ The supplied wood screw may not be used depending on the type of TV stand. In this case, or when the securing strength is not enough, use commercial screws 1/8 to 3/16 inches (3 to 4 mm) diameter to fit to the TV stand. Consult your dealer about the types of screw.

2 Securing the TV to the wall with cords.

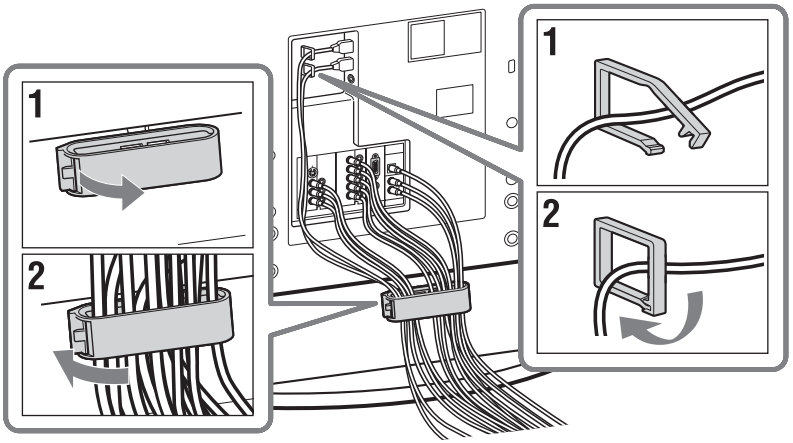


① Thread strong cords or chains (not supplied) through the handle on the rear side of the TV, and tie firmly.

② Secure the cords or chains to a stable place, such as a wall or column.

Bundling the Connecting Cables

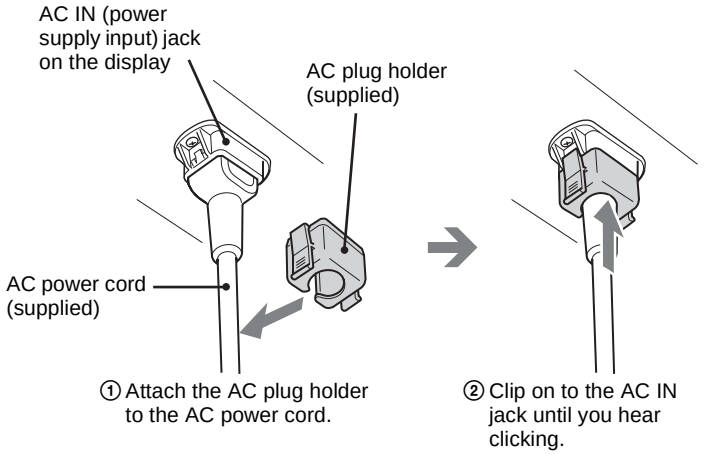
You can bundle the connecting cables as illustrated below.



✍ Do not bundle the AC power cord with other connecting cables.

Connecting the AC Power Cord

1 Connect the AC power cord (supplied) to the AC IN jack of the TV.
2 Secure the AC plug holder to the display's AC IN jack.


AC IN (power supply input) jack on the display
AC plug holder (supplied)
AC power cord (supplied)
① Attach the AC plug holder to the AC power cord.
② Clip on to the AC IN jack until you hear clicking.

✍ When you unplug the AC power cord, drag the holder down by pushing both sides of the holder, then pull out the plug.

When Installing on a Wall

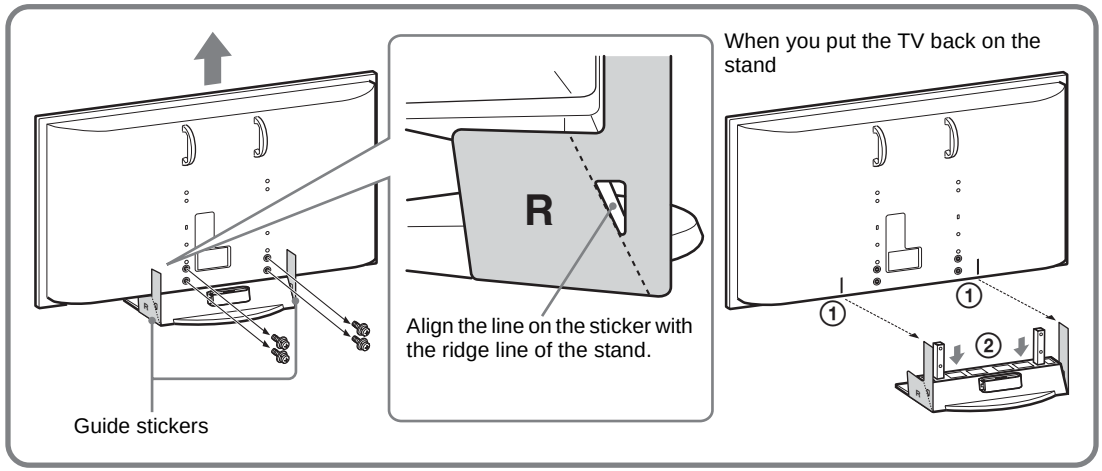
This TV can be installed on a wall using the Wall-Mount Bracket (sold separately). Be sure to use the specified Wall-Mount Bracket (see page 2). **Do not place the TV face down or lay flat on its back, the panel may be damaged. Be sure to keep the TV in its upright position at all times.** The guide stickers have been provided with the TV for your convenience to locate the screw holes when you put the TV back on the stand. **Apply the stickers to the TV before removing the screws.** Follow the steps below to remove the Table-Top Stand first, then use the instruction guide that accompanied the Wall-Mount Bracket (sold separately) to mount the TV on the wall.

✍ Do not remove the Table-Top Stand for any reason other than to wall-mount the TV.

To remove the Stand

1. Disconnect all the cables from the TV.
2. Start removing the screws behind the TV. (See illustration below) Do not remove any other screws from the TV.
3. Attach the hooks of your Wall-Mount Bracket.
4. When screws are removed, lift the TV off the stand.
   Make sure the task is carried out by four people. Do not attempt to lift the TV by yourself.

For bracket installation, refer to the instruction guide provided by the Wall-Mount Bracket model for your TV. Sufficient expertise is required in installing this TV, especially to determine the strength of the wall for withstanding the TV's weight. **For product protection and safety reasons, Sony strongly recommends that you use the Wall-Mount Bracket model designed for your TV and the wall-mounting of your TV should be performed by Sony dealers or licensed contractors.**



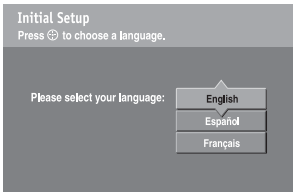
✍ Be sure to store the removed screws, Table-Top Stand and spare guide stickers in a safe place until you are ready to reattach the Table-Top Stand. Use the supplied guide stickers when you put the TV back on the stand. Keep the screws away from small children.

Setting Up the Channel List – Initial Setup

After you finish connecting the TV, you can run the Initial Setup to create a list of available analog and digital channels. The Initial Setup screen appears when you turn on the TV for the first time after hooking it up.

1 Press TV POWER ◯ to turn on the TV.
The Initial Setup screen appears.

2 Press ↑/↓ to highlight the on-screen display language. Then press ⊕. The message "Start auto program now?" appears.

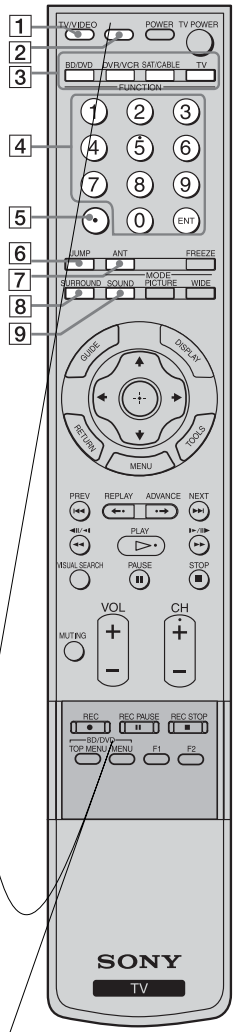


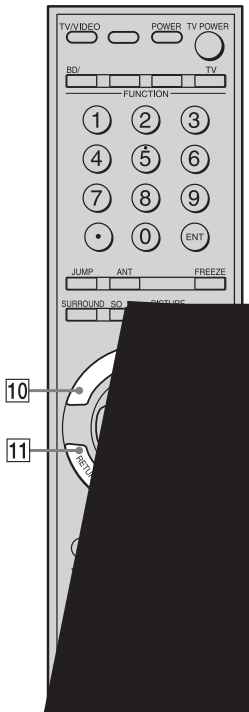
3 Press ↑/↓ to highlight "Yes" then press ⊕.
Auto Program performed through Initial Setup will automatically create a list of receivable channels from both VHF/UHF antenna and cable TV channels if both sources are connected.

✍ If you select "No" during Initial Setup, the Initial Setup screen will reappear each time you turn on the TV until you complete Auto Program.

To run Auto Program again at a later time

Use the Auto Program feature, see page 39.

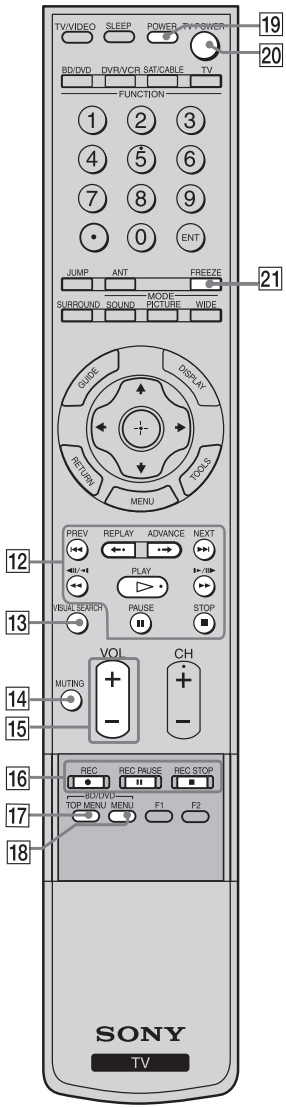

1
2
3
4
5
6
7
8
9
TV/VIDEO
POWER
TV POWER
BD/DVD
DVR/VCR
SAT/CABLE
TV
FUNCTION
ENT
JUMP
ANT
FREEZE
MODE
SURROUND
SOUND
PICTURE
WIDE
GUIDE
DISPLAY
RETURN
TOOLS
MENU
PREV
REPLAY
ADVANCE
NEXT
PLAY
VISUAL SEARCH
PAUSE
STOP
VOL
CH
MUTING
REC
REC PAUSE
REC STOP
BD/DVD
TOP MENU
MENU
F1
F2
SONY
TV



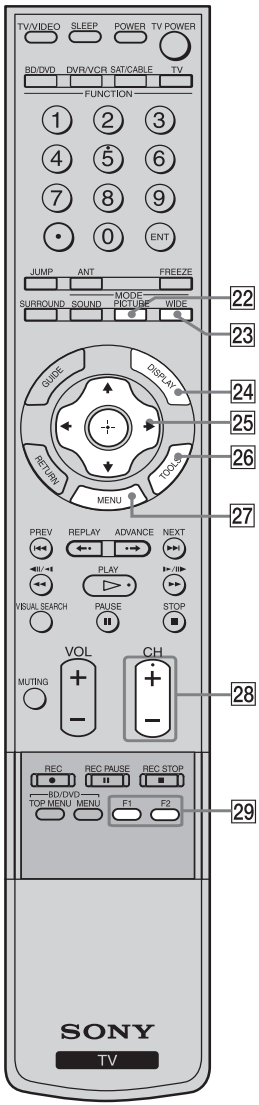
Button	Description
10 GUIDE	Press to display the guide when you are watching analog or digital channels.

Using the Guide

The guide allows you to select the channels from a channel list. The guide also provides information about the current program being shown on each channel (if information is available from the station).



Button	Description
12 BD/DVD or DVR/VCR Operating Buttons	When FUNCTION is switched on BD (Blu-ray Disc)/DVD or DVR/VCR, these buttons operate the video equipment you have programmed into the remote control. For details, see "Using Other Equipment with Your Remote Control" on page 26. ⏮ PREV: Press to replay the current program from the previous chapter mark (if any) or from the beginning of the live TV cache. ⏪ REPLAY: Press to replay the current program for a set period of time. ⏩ ADVANCE: Press to advance forward a set period of time when playing back a recorded program. ⏭ NEXT: Press to advance forward to the next chapter mark (if any) or to live TV when playing back a recorded program. ◀◀ (fast reverse): Press to play a program in fast rewind mode. ▷ PLAY: Press to play a program at a normal speed. ▶▶ (fast forward): Press to play a program in fast forward mode. ❚❚ PAUSE: Press to pause playback. ■ STOP: Press to stop the playback of a recorded program.
13 VISUAL SEARCH	Only for Sony DVD recorders with the visual search function. For details, see the operating instructions supplied with the DVD recorder.
14 MUTING	Press to mute the sound. Press again or press VOL + to restore the sound. ✍ The MUTING function is not available when Speaker is set to Off, Audio Out is set to Fixed and the headphones are not connected.
15 VOL +/–	Press to adjust the volume.
16 DVR/VCR Record Buttons	● REC: Press to record. Pressing this button alone starts the recording process. ❚❚ REC PAUSE: Press to pause the recording. ■ REC STOP: Press to stop the recording.
17 BD/DVD TOP MENU	Press to display the top menu of the DVD disc. Press to display the DVD disc menu.
18 BD/DVD MENU	✍ For further information, refer to the operating manual of the connected equipment.
19 POWER	Press to turn on and off the external equipment selected from the FUNCTION buttons 3.
20 TV POWER	Press to turn on and off the TV.
21 FREEZE	Press once to display a frozen image of the current program. Press again to return to the program.



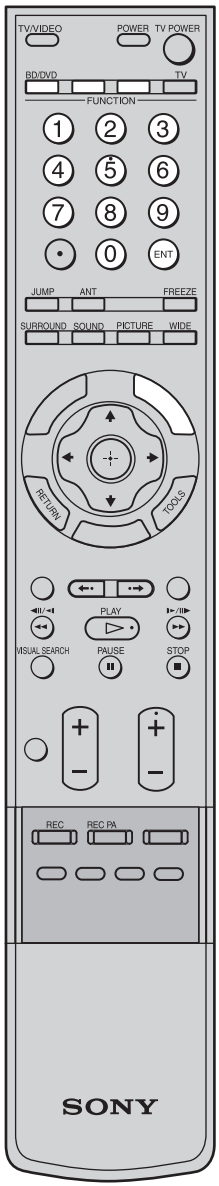
Button	Description
22 PICTURE	Press repeatedly to cycle through the available picture modes: Vivid, Standard, Custom. The picture modes can be also accessed in the Picture settings. For details, see "Picture Settings" on page 32.
23 WIDE	Press repeatedly to step through the Wide Mode settings: Wide Zoom, Normal, Full, Zoom. The Wide Mode settings can be also accessed in the Screen settings. See page 37.

Changing the Wide Screen Mode

4:3 Original source Standard definition source	16:9 Original source High definition source
Wide Zoom	Wide Zoom
Normal	Normal
Full	Full
Zoom	Zoom

24 DISPLAY	Press once to display the current channel number, channel label, program-related information (if available), time, Wide Mode settings and remaining sleep time (when Sleep is set, see page 44). The OSD (on screen display) will turn off automatically in a few seconds, or you can press DISPLAY again to turn it off immediately.
25 ↑/↓/←/→ ⊕	Press ↑/↓/←/→ to move the on-screen cursor. Press ⊕ to select/confirm an item.
26 TOOLS	Press to display the Tools menu that is associated with your current input: Picture Mode, Sound Mode, Alternate Audio, Wide Mode, Add to Favorites and Caption Vision (CC). (See pages 32, 35, 36, 37, 39 and 43.) ✍ The menus you can select may vary depending on the input signal.
27 MENU	Press to display the MENU with TV functions and settings. See "Overview of MENU" on page 30.
28 CH +/–	Press to scan through channels. To scan quickly through channels, press and hold down either +/–.
29 F1/F2	Press to select the function of connected components. For details, see "Using Other Equipment with Your Remote Control" on page 26.

Programming the Remote Control



The remote control is preset to operate Sony brand video equipment.

Sony Equipment	*Programmable Code Number*
BD/DVD	101 (Sony Blu-ray Disc Player)
DVR/VCR	901 (Sony Dream System)
SAT/CABLE	801 (Sony Satellite Receiver)

Follow the steps below to program your TV's remote control to operate non-Sony video equipment.

Find the three-digit code for your equipment from the "Manufacturer's Codes" listed on page 25. If more than one code number is listed, try entering from the code listed first.

1 Press and hold the , or FUNCTION button you want to program on the remote control and press the button simultaneously.

The selected FUNCTION button (BD/DVD, DVR/VCR or SAT/CABLE) will flash.

2 Enter the three-digit manufacturer's code number using the ⓪-⑨ buttons while the FUNCTION button is lit. If the code is not entered within 10 seconds, you must start again from step 1.

3 Press the button while the FUNCTION button is lit.

When the programming is correct, the selected FUNCTION button blinks twice, and when not, blinks five times.

✍ While , and buttons are labeled as such, you can still program any of your connected equipment using any one of the buttons regardless of the label. For example, button can be programmed to operate your VCR. If you have a DVD/VCR combo that you want to operate with your TV remote control, you can program with or or even , but remember which button you have programmed for your equipment.

To check if the code works

Aim your TV's remote control at the equipment, and press the green button. If you can turn the equipment on and off by using the remote control, then the programming is complete. If not, try the next code listed.

✍ If no code is input within the above specified time, or an invalid or incorrect code number is input, the remote control automatically goes back to the previous setting.

✍ In some cases, you may not be able to program your remote control to operate other equipment. In such cases, use the equipment's own remote control.

Manufacturer's Codes

DVD Players

Manufacturer	Code
Sony	751, 763
General Electric/RCA	755
Hitachi	758
JVC	756
Magnavox	757
Mitsubishi	761
Oritron	759
Panasonic	753
Philips	757
Pioneer	752, 778
RCA/PROSCAN	755
Samsung	758
Toshiba	754
Zenith	760, 762

DVD/VCR Combo Units

Manufacturer	Code
Sony	767
Broksonic	776
JVC	775
Panasonic	777
Samsung	774
Toshiba	773
Zenith	768

HDD/DVD Combo Units

Manufacturer	Code
Sony	770, 771, 772

DVD Changers

Manufacturer	Code
Sony	765
Panasonic	766

DVR

Manufacturer	Code
Sony	901

Blu-ray Disc Player (BD)

Manufacturer	Code
Sony	101, 102, 103

5.1ch DVD AV System

Manufacturer	Code
Sony (DAV)	601, 602, 603, 604

AV Receivers

Manufacturer	Code
Sony	764

VCRs

Manufacturer	Code
Sony	301, 302, 303 (VHS, 8mm, Beta)
Sony DV	348
Admiral (M. Ward)	327
Aiwa*	338, 344
Audio Dynamic	314, 337
Broksonic	317, 319
Canon	308, 309
Citizen	332
Craig	302, 332
Curtis Mathes	304, 309, 338
Daewoo	309, 312, 341
DBX	314, 336, 337
Dimensia	304
Emerson	316, 317, 318, 319, 320, 341
Fisher	330, 335
Funai	338
General Electric	304, 309, 329
Go Video	322, 339, 340
Goldstar	332
Hitachi	304, 305, 306, 338
Instant Replay	308, 309
JC Penney	304, 305, 309,314, 330, 336, 337
JVC	314, 336, 337, 345, 346, 347
Kenwood	314, 332, 336, 337
LG	332
LXI (SEARS)	305, 330, 332, 335, 338
Magnavox	308, 309, 310
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	304, 305
Mitsubishi/MGA	323, 324, 325, 326
Multitech	321, 325, 338
NEC	314, 336, 337
Olympic	308, 309
Optimus	327
Orion	317
Panasonic	306, 307, 308, 309
Pentax	304, 305
Philco	308, 309
Philips	308, 309, 310
Pioneer	308
Quasar	306, 308, 309
RCA/PROSCAN	304, 305, 308, 309, 310, 311, 312, 313, 329
Realistic	309, 324, 328, 330, 335, 338
Sansui	314
Samsung	313, 321, 322
Sanyo	330, 335
Scott	312, 313, 321, 323, 324, 325, 326, 335
Sharp	327, 328
Signature 2000 (M. Ward)	327, 338
SV2000	338
Sylvania	308, 309, 310, 338
Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 337, 338
Technics	308, 309
Toshiba	311, 312
Wards	327, 328, 331, 332, 335
Yamaha	314, 330, 336, 337
Zenith	331

Cable Boxes

Manufacturer	Code
Sony	230
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/ General Inst./ Motorola	201, 202, 203, 204, 205, 206, 207, 208, 218, 222
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	211, 214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

Satellite Receivers

Manufacturer	Code
Sony	801
Dish Network	810
Echostar	810
General Electric	802
Hitachi	805
Hughes	804
JVC	810
Mitsubishi	809
Panasonic	803
Philips	811
RCA/PROSCAN	802, 808
Toshiba	806, 807
Samsung	812

* If an Aiwa VCR does not work even though you enter the code for Aiwa, enter the code for Sony instead.

Using Other Equipment with Your Remote Control

To operate other equipment connected to your TV, first turn to page 25 and program the necessary code. For operating video equipment, press TV/VIDEO repeatedly until you see the video input on the screen for your connected equipment. Remote control tips are provided below.

✍ Some functions cannot be operated depending on the equipment. In that case, operate by the remote control supplied with the equipment.

Operating a Cable Box

To Do This ...	*Press ...*
Activate the remote control to operate the cable box	SAT/CABLE (FUNCTION)
Turn on/off	POWER

To Do This ...	*Press ...*
Select a channel	0-9, ENT
Change channels	CH +/–
Back to previous channel	JUMP

Operating a Satellite Receiver

To Do This ...	*Press ...*
Activate the remote control to operate the satellite receiver	SAT/CABLE (FUNCTION)
Turn on/off	POWER
Select a channel	0-9, ENT
Change channels	CH +/–
Back to previous channel	JUMP

To Do This ...	*Press ...*
Display channel number	DISPLAY
Display SAT Guide	GUIDE
Display SAT Menu	MENU
Move highlight (cursor)	↑ ↓ ← →
Select item	⊕

Operating a VCR

To Do This ...	*Press ...*
Activate the remote control to operate the VCR	DVR/VCR (FUNCTION)
Turn on/off	POWER
INPUT SELECT	TV/VIDEO
Select a channel	0-9, ENT
Change channels	CH +/–

To Do This ...	*Press ...*
Record	●
Play	▷
Stop	■
Fast forward	▶▶
Rewind the tape	◀◀
Pause	❚❚ (press again to resume normal playback)

Operating a DVD Player or DVD Changer

To Do This ...	*Press ...*
Activate the remote control to operate the DVD	BD/DVD (FUNCTION)
Turn on/off	POWER
If you have a DVD changer, to skip disc	F1
Play	▷
Stop	■
Pause	❚❚ (press again to resume normal playback)

To Do This ...	*Press ...*
Step through different tracks of the disc	◀◀ to fast reverse or ▶▶ to fast forward the disc when pressed during playback
Step through different chapters of the disc	▶▶❙ to step forward or ❙◀◀ to step backward
Select a track directly	0-9, ENT
Display the disc menu or top menu	BD/DVD MENU or TOP MENU
Operate the DVD menu	↑ ↓ ← →, ⊕
Display the system MENU	MENU

Operating a Blu-ray Disc Player (BD)

To Do This ...	Press ...
Activate the remote control to operate the Blu-ray Disc Player	BD/DVD (FUNCTION)
Turn on/off	POWER
Play	▷
Stop	■
Pause	❚❚ (press again to resume normal playback)

To Do This ...	Press ...
Step through different tracks of the disc	◀◀ to fast reverse or ▶▶ to fast forward the disc when pressed during playback
Display the POP UP menu (BD)	BD/DVD MENU
Display the disc menu (DVD)	BD/DVD MENU
Display the top menu (BD)	BD/DVD TOP MENU
Display the top menu (DVD)	BD/DVD TOP MENU
Operate the menu	↑ ↓ ← →, ⊕

Operating a 5.1ch DVD AV System (Sony DAV)

To Do This ...	Press ...
Activate the remote control to operate the DVD	BD/DVD (FUNCTION)
Turn on/off	POWER
Select other equipment connected to the DAV	F1
Disk skip	F2
Display the disc menu or top menu	BD/DVD MENU or TOP MENU
Select a track directly	0-9, ENT
Play	▷

To Do This ...	Press ...
Stop	■
Pause	❚❚
Search the picture forward or backward	▶▶ or ◀◀ during playback
Specify the previous chapter/track Specify the next chapter/track	⏮ ⏭
Move highlight (cursor)	↑ ↓ ← →
Select item	⊕
Master volume	VOL +/–, MUTING

Operating a DVD/VCR Combo Unit

To Do This ...	Press ...
Activate the remote control to operate the DVD/VCR	DVR/VCR (FUNCTION)
Turn on/off	POWER
Select the DVD Select the VCR	F 1 F 2
Display the disc menu or top menu	BD/DVD MENU or TOP MENU
Play	▷
Stop	■
Pause	❚❚

To Do This ...	Press ...
Search the picture forward or backward	▶▶ or ◀◀ during playback
Move highlight (cursor) and select (DVD)	↑ ↓ ← → ⊕
Record (VCR)	●
Change channels (VCR)	CH +/– or 0-9, ENT (using tuner)
Adjust tracking (VCR)	CH +/– (during tape playback)
Index search	⏮ ⏭
INPUT SELECT	TV/VIDEO

(Continued)

Operating a HDD/DVD Combo Unit

To Do This ...	Press ...
Activate the remote control to operate the DVD/HDD	DVR/VCR (FUNCTION)
Turn on/off	POWER
Select the HDD Select the DVD	F 1 F 2
Play	▷
Stop	■
Pause	❚❚
Search the picture forward or backward	▶▶ or ◀◀ during playback
Move highlight (cursor) and select	▲▼◀▶ ⊕

To Do This ...	Press ...
Record	●
Record stop	■
Record pause	❚❚
Specify the previous chapter/track Specify the next chapter/track	⏮ ⏭
Replay	↩
Advance	↪
Display the disc menu or top menu	BD/DVD MENU or TOP MENU
INPUT SELECT	TV/VIDEO

Operating an AV Receiver

To Do This ...	Press ...
Activate the remote control to operate the AV Receiver	DVR/VCR (FUNCTION)
Turn on/off	POWER

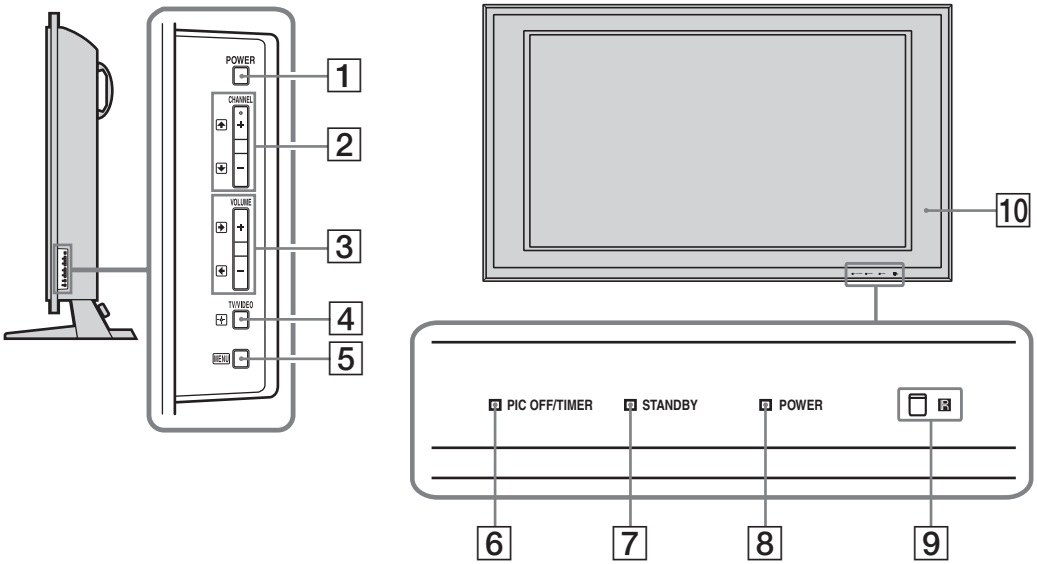
To Do This ...	Press ...
Master volume	VOL +/–, MUTING
Select other input connected to AV receiver	F1

Operating a DVR

To Do This ...	Press ...
Activate the remote control to operate the DVR	DVR/VCR (FUNCTION)
Turn on/off	POWER
Play	▷
Jump back while viewing live or recorded programs	REPLAY
Slow mode	◀◀/◀◀ (press lightly)
Jump forward while viewing recorded programs	↪

To Do This ...	Press ...
Jump forward to the next available chapter	⏭
Stop	■
Pause	❚❚
Record	●
Record stop	■
Record pause	❚❚

TV Controls

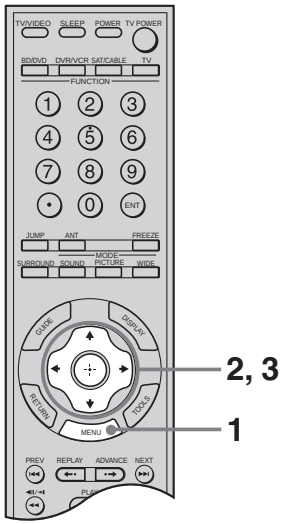


Item		Description
1	POWER	Press to turn on and off the TV.
2	CHANNEL +/–	Press to scan through channels. To scan quickly through channels, press and hold down either –/+. In the MENU screen, these buttons serve as up/down buttons.
3	VOLUME +/–	Press to adjust the volume. In the MENU screen, these buttons serve as left/right buttons.
4	TV/VIDEO	Press to cycle through the video inputs. If you set a certain input to Skip in Label Video Inputs, then the input will not appear. For details, see page 43. In the MENU screen, this button serves as confirming the selection or setting.
5	MENU	Press to display MENU with TV functions and settings (see "Overview of MENU" on page 30).
6	PIC OFF/TIMER LED	Lights up in green when Picture Off is activated. Lights up in orange when the timer is set. When the timer is set, this LED will remain lit even if the TV is turned off. For details, see page 44.
7	STANDBY LED	Lights up in red when your TV is in the PC standby mode. If the LED blinks in red continuously, this may indicate the TV needs servicing (see contacting Sony information on page 48).
8	POWER LED	Lights up in green when the TV is turned on.
9	(IR) Infrared Receiver/Light Sensor	Receives IR signals from the remote control. Do not put anything near the sensor, as its function may be affected.
10	Speaker	Outputs the audio signal.

✍ The CHANNEL + button has a tactile dot. Use it as a reference when operating the TV.

Overview of MENU

MENU provides one-button access for controlling your TV. It enables you to perform a variety of tasks intuitively with a control panel on the screen rather than a variety of remote control button presses. When you press the MENU button, you can select from basic TV functions: External Inputs, Favorites, Cable, Antenna and Settings.



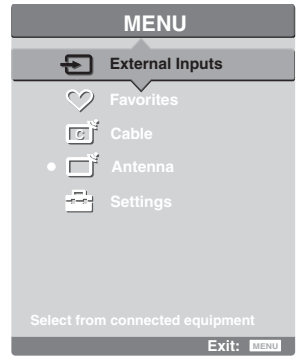
1 Press MENU on the remote.
The MENU control panel appears.

2 Press ↑/↓ to highlight the item.

3 Press ⊕ to select an option.
Press MENU to exit.

✍ A dot appears next to the icon of the currently active input (External Inputs, Cable, and Antenna only).

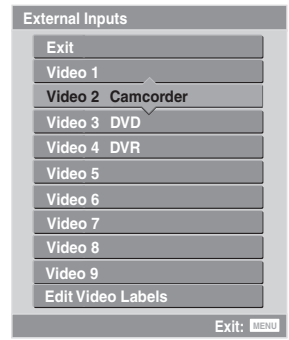
✍ When the TV is displaying the input from a connected PC, the menu only shows PC settings. For more information about PC settings, see page 46.



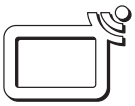
MENU	Description
External Inputs	The External Inputs feature lets you select the external inputs connected to your TV. You can also assign a label using Label Video Inputs in the Setup settings (see page 43).

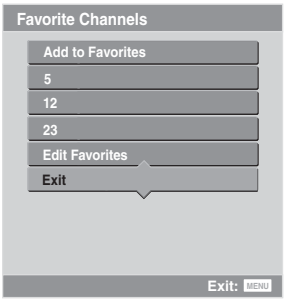
1 Highlight External Inputs on the MENU control panel and press ⊕.

2 Press ↑/↓ to highlight the desired external input and press ⊕.

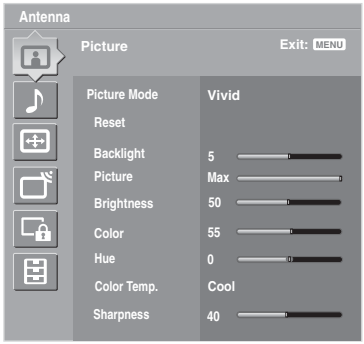


✍ To display PC settings, select Video 9 in External Inputs. For more information about PC settings, see page 46.

MENU	Description
Favorites	The Favorites feature lets you select programs from a list of up to 16 favorite channels that you specify. **1** Highlight Favorites from the MENU control panel and press ⊕. The Favorite Channels list appears. **2** Make your selection by pressing ↑/↓ to highlight the desired channel then press ⊕. To add the current channel to the list of Favorite Channels, highlight Add to Favorites and press ⊕. To manually edit your list of favorite channels, select Edit Favorites. For more information, see page 39.
Cable	The Cable feature displays the most recently viewed channel on the cable input. When tuned to the channel, the program banner and channel number will be displayed. ✍ To turn on the program banner, select Settings and set the Info Banner option to On in the Setup settings (see page 43).
 Antenna	The Antenna feature displays the most recently viewed channel on the antenna input. When tuned to the channel, the program banner and channel number will be displayed. ✍ To turn on the program banner, select Settings and set the Info Banner option to On in the Setup settings (see page 43).
Settings	The Settings feature lets you enter the settings menu. Settings and adjustments can be performed from the Settings menu. The information on various settings starts from page 32. **Navigating Through Settings** **1** Press MENU. **2** Select . **3** Highlight an item: Picture, Sound, Screen, Channel, Parental Lock, Setup. **4** Press ⊕ to select an option. To exit Settings, press MENU. ✍ The options you can adjust vary depending on the situation. Unavailable options are grayed out or not displayed. ✍ To display PC settings (see page 46), select Video 9 in External Inputs and switch to PC input. Pressing MENU shows PC settings when the TV is displaying the input from a connected PC.

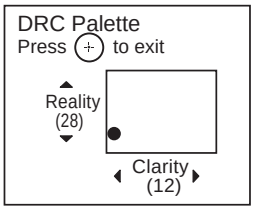


Picture Settings



To display the Picture settings, see "Navigating Through Settings" (see page 31).

Option	*Description*	
Picture Mode	Vivid	Select for enhanced picture contrast and sharpness.
	Standard	Select for standard picture settings. Recommended for home entertainment.
	Custom	Allows you to store your preferred settings.
	✍ You can set up a Picture Mode (Vivid, Standard, Custom) independently for the TV input and for each video input (Video 1 to Video 8). Your Picture Mode settings are automatically saved upon selection.	
Reset	Resets the current settings to the default values (except for Advanced Settings).	
Backlight	Adjust to brighten or darken the backlight.	
Picture	Adjust to increase or decrease picture contrast.	
Brightness	Adjust to brighten or darken the picture.	
Color	Adjust to increase or decrease color intensity.	
Hue	Adjust to increase or decrease the green tones.	
Color Temp. *White adjustment*	Cool	Select to give the white colors a bluish tint.
	Neutral	Select to give the white colors a neutral tint.
	Warm 1, 2	Select to give the white colors a reddish tint. Available only when Picture Mode is set to Custom.
Sharpness	Adjust to sharpen or soften the picture.	
Noise Reduction	Select to reduce the noise level of connected equipment, and the VHF/UHF or cable inputs. Select from Auto, High, Medium, Low and Off.	
	✍ Auto is not available when you are using either HDMI or component connections.	
DRC Mode	Produces a high-resolution picture for high-density sources (e.g., Blu-ray Disc Player, DVD Player, satellite receiver).	
	Mode 1	Recommended mode.
	Mode 2	Only available for 1080i format. Mode 2 is especially effective when original standard-definition signals have been up-converted to 1080i format.
	Off	Select to turn off DRC Mode.

Option		Description
		✍ DRC Mode is available when you are watching 480i, 480p, 720p or 1080i sources. It is not available when Game Mode is On or you are using the Freeze feature.
DRC Palette	Custom	Allows you to customize the level of detail (Reality) and smoothness (Clarity) for input sources. For example, you can create a Custom setting for your cable input's picture, and create another for your DVD player's picture. **1** Press the arrow buttons to highlight Custom then press ⊕. The DRC palette appears.  **2** Press the arrow buttons to adjust the position of the marker (●). As you move the ● higher along the Reality axis, the picture becomes more detailed. As you move the ● to the right along the Clarity axis, the picture becomes smoother. **3** To save the setting, press ⊕.
		✍ DRC Palette is available when you are watching 480i, 480p, 720p or 1080i sources. It is not available when Game Mode is On, DRC Mode is Off or you are using the Freeze feature.
Advanced Settings *Available only when Picture Mode is set to Custom*	Reset	Resets all the Advanced Settings to the default values (except for White Balance).
	Black Corrector	Enhances black areas of the picture for stronger contrast.
	Advanced C.E. (Advanced Contrast Enhancer)	Automatically optimizes the backlight and contrast. This setting is especially effective for dark image scenes. It will increase the contrast distinction of the darker picture scenes.
	Gamma	Adjusts the balance between the light and dark areas of the picture.
	Clear White	Emphasizes white and light colors.
	Live Color	Makes colors more vivid. ✍ Live Color is not available when Color Space is set to Standard.
	Color Space	Use to select the range of color reproduction from Wide or Standard.
	White Balance	Adjusts the color temperature color by color.
	Detail Enhancer	Enhances the details of the picture.
	Edge Enhancer	Enhances the outline of the picture.

Viewing Images Corresponding to "x.v.Color" in the Appropriate Picture Mode

When images corresponding to "x.v.Color" are input via the HDMI or component input of this TV, view with the following settings:

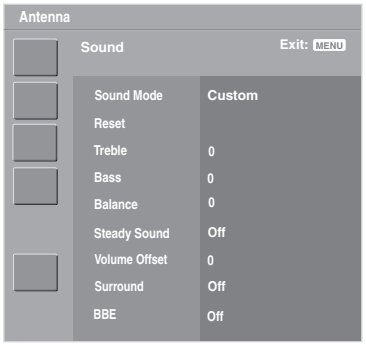
Picture Settings (see page 32)

- Picture Mode: Custom
- Color Space: Standard

About "x.v.Color"

- "x.v.Color" is a term for a device corresponding to the xvYCC standard, and enables a wider color range than conventional devices.
- xvYCC is an international standard for color space in video. This standard enables a wider color range than the currently used broadcast standard.

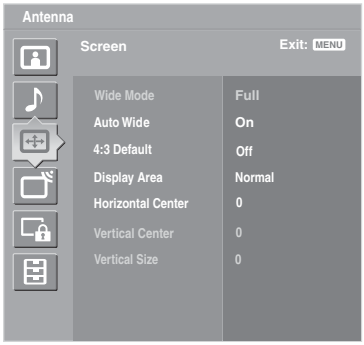
Sound Settings



Option	Description	
Sound Mode	Dynamic	Select to enhance treble and bass.
	Standard	Suitable for spoken dialog.
	Custom	Flat setting. Allows you to store your preferred settings.
	✍ You can set up a Sound Mode (Dynamic, Standard, Custom) independently for the TV input and for each video input (Video 1 to Video 8). Your Sound Mode settings are automatically saved upon selection.	
Reset	Reset the following options to the default value: Treble, Bass, Balance, Steady Sound, Volume Offset, Surround and BBE.	
Treble	Adjust to increase or decrease higher-pitched sounds.	
Bass	Adjust to increase or decrease lower-pitched sounds.	
Balance	Adjust to emphasize left or right speaker balance.	
Steady Sound	On	Select to stabilize the volume across all programs and commercials.
	Off	Select to turn off Steady Sound.
Volume Offset	Adjust the volume level of the current input (TV or video input) relative to other inputs.	
Surround	TruSurround XT	Select for surround sound (for stereo programs only).
	Off	Select for normal stereo or mono reception.
BBE	Select to give sound more impact by compensating for phase effects in speakers. Select from High, Low and Off.	
	✍ BBE is only available when Sound Mode is set to Custom.	
MTS *Enjoy stereo, bilingual and mono programs*	Stereo	Select for stereo reception when viewing a program broadcast in stereo.
	Auto SAP	Select to automatically switch to second audio programs when a signal is received. If no SAP signal is present, the TV remains in Stereo mode.
	Mono	Select for mono reception. Use to reduce noise during weak stereo broadcasts.
	✍ MTS is available only for analog programs.	

Option	*Description*	
Alternate Audio *Digital channels only*	Select among the available options to switch among the alternate audio streams. The program you are tuned to may be broadcast in a different language in the alternate audio streams.	
	✍ The Alternate Audio option is not available if the program is not broadcast with alternate audio streams.	
Speaker	On	Select to turn on the TV speakers.
	Off	Select to turn off the TV speakers and listen to the TV's sound only through your external audio receiver and speakers.
	✍ When you connect the headphones, the TV speakers are disabled.	
Audio Out *Easy control of volume adjustments*	Variable	The audio output from your audio system can be controlled by the TV's remote control.
	Fixed	The audio output of the TV is fixed. Use your audio receiver's remote control to adjust the volume (and other audio settings) through your audio system.
A/V Sync *Digital channels only*	Off/1/2/3	Use this option to make adjustments to audio and video synchronization when you have external equipment connected to DIGITAL OUT of the TV. Select Off (default value) to make no adjustments. Select 1, 2 or 3 to synchronize the video and audio from your connected external equipment.

Screen Settings



To display the Screen settings, see "Navigating Through Settings" (see page 31).

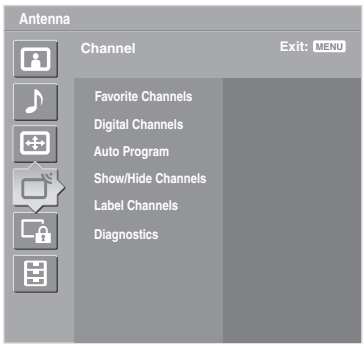
Option	Description	
Wide Mode	Wide Zoom	Select to enlarge the 4:3 picture to fill the 16:9 screen, keeping the original image as much as possible.
	Normal	Select to display the 4:3 picture in its original size when the original source is 4:3. When the original source is 16:9, then the picture may be compressed horizontally.
	Full	Select to enlarge the picture horizontally to fill the screen when the original source is 4:3 (standard definition source). When the original source is 16:9 (high definition source), select this mode to display the 16:9 picture in its original size.
	Zoom	Select to enlarge the original picture without distorting the aspect ratio.
	✍ You can set up a Wide Mode (Wide Zoom, Normal, Full, Zoom) independently for the TV input and for each video input (Video 1 to Video 8). Your Wide Mode settings are automatically saved upon selection. For examples of each mode, see page 23.	
	✍ You can switch the Wide Mode settings by pressing the WIDE button on the remote control.	
Auto Wide	On	Select to automatically change to the screen mode that is best for the current program. If frequent screen changes are disturbing to you, select Off.
	Off	Select to turn off the Auto Wide option. Choose a screen mode from the Wide Mode option.

(Continued)

Option	*Description*	
4:3 Default *Select the default screen mode to use for 4:3 sources.*	Wide Zoom	Select to enlarge the 4:3 picture, to fill the 16:9 screen, keeping the original image as much as possible.
	Normal	Select to display the 4:3 picture in its original size.
	Full	Select to enlarge the 4:3 picture horizontally only, to fill the display area.
	Zoom	Select to enlarge the picture horizontally and vertically to an equal aspect ratio that fills the wide screen.
	Off	Select to continue using the current Wide Mode setting when the channel or input is changed.
	✍ 4:3 Default is not available if Auto Wide is set to Off. ✍ If 4:3 Default is set to anything but Off, the Wide Mode setting changes only for the current channel. When you change channels (or inputs), Wide Mode is automatically replaced with the 4:3 Default setting. To retain the current Wide Mode setting as channels and inputs are changed, set 4:3 Default to Off.	
Display Area	Allows you to adjust the screen area of the displayed image.	
	Full Pixel	Select to display the picture for 1080i or 1080p sources in its original size.
	Normal	Select to display the picture in its standard size.
	-1/-2	Select to enlarge the picture to hide the edge of the picture.
Horizontal Center	Allows you to move the position of the picture left and right. Press ◆/◆ and press ⊕ to adjust.	
Vertical Center	Allows you to move the position of the picture up and down. (Available only in Zoom.) Press ▲/▼ and press ⊕ to adjust.	
Vertical Size	Allows you to adjust the vertical size of the picture. (Available only in Wide Zoom and Zoom.) Press ▲/▼ and press ⊕ to adjust.	

✍ Size adjustment is especially useful for Wide Zoom picture conditions such as news ticker information at the bottom or top of the screen.

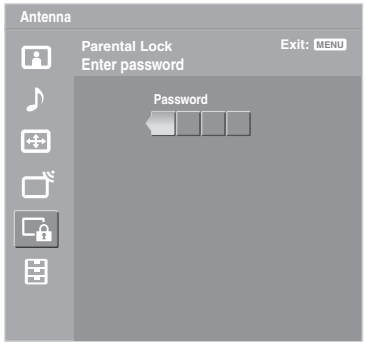
Channel Settings



To display the Channel settings, see "Navigating Through Settings" (see page 31).

Option	Description
Favorite Channels	Lets you set up a list of up to 16 of your favorite channels. **1** Press ↑/↓ to scroll to the slot you would like to edit. **2** Enter your favorite channel number and press ⊕ to apply and save. To select other favorite channel numbers, repeat steps 1 and 2. ✍ To select favorite channel numbers that you specified, see page 31.
Digital Channels	Add Select to add digital channels.
Auto Program	Automatically sets up the channel list on the TV for all receivable channels for the current TV input (either Antenna or Cable).
Show/Hide Channels	Allows you to show or hide channels that appear in the program guide and when you use the CH+/- buttons to channel surf. **1** Press ↑/↓ to highlight the channel that you want to show or hide. To move between the Major and Minor subchannel lists, press ←/→. **2** To change a channel's setting to Shown or Hidden, press ⊕. To show or hide more channels, repeat steps 1 and 2. ✍ Channels that you set to be hidden can be accessed only with the 0-9 buttons. ✍ If you select to hide or show a major digital channel, all the subchannels are automatically hidden or shown. To show or hide an individual sub-channel within a digital channel, you must individually select that sub-channel to show or hide. ✍ If you hide all sub-channels of a major digital channel, that digital channel is automatically set to Hidden.
Label Channels	Allows you to assign labels (such as station call letters) to channel numbers. **1** Press ↑/↓ to scroll through the channel numbers. Then press ⊕ to select the channel number that you want to assign a label. **2** Press ↑/↓ to scroll through the label characters (A-Z, 0-9, etc.). Press ⊕ to move to the next character. Repeat to add up to 7 characters to the label. To assign labels to more channels, repeat steps 1 and 2.
Diagnostics	Display diagnostics information about the current channel and TV. This can be useful in providing information to an authorized technician or repair person.

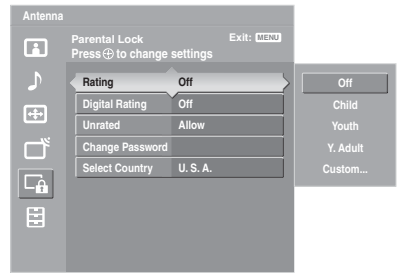
Parental Lock Settings



To display the Parental Lock settings, see "Navigating Through Settings" (see page 31).

Use 0-9 on the remote control to enter a four-digit password.

The Parental Lock option appears.



Option	*Description*	
Rating	Off	Turn Parental Lock off. No programs are blocked from viewing.
	Child	Maximum ratings permitted are: U.S.: TV-Y, TV-G, G Canada: C, G, TV-Y
	Youth	Maximum ratings permitted are: U.S.: TV-PG, PG Canada: C8+, PG, 8 ans+, TV-PG
	Y. Adult	Maximum ratings permitted are: U.S.: TV-14, PG-13 Canada: 14+, 13 ans+, TV-14
	Custom...	Select to set ratings manually. U.S.: See page 41 for details. Canada: See page 42 for details.
✍ If you are not familiar with the Parental Guideline rating system, you should select Child, Youth, or Y. Adult to help simplify the rating selection. To set more specific ratings, select Custom.		
Digital Rating *(Available only in U.S.A. where advanced ratings exist)*	Off	Turn Digital Rating off. No programs that contain downloadable ratings are blocked from viewing.
	Custom...	Select to block programs based on downloadable ratings.
	Clear All	Select to clear the entire downloadable rating system.
	✍ This action will delete the current Digital Rating menu and the menu will no longer be available until the TV is tuned to a channel that contains downloadable ratings. ✍ This icon ⓘ will appear on the information banner across the screen indicating the availability of the new downloadable rating information when the Digital Rating is set to the Custom option. ✍ This setting is only available if digital ratings have been downloaded by your TV and ratings have been set for U.S.A. in Select Country (see page 41).	

Option	Description	
Unrated *(available only in U.S.A.)*	Allow	Allows programs and movies that are broadcast without a rating.
	Block	Blocks all programs and movies that are broadcast without a rating.
	✍ If you block unrated TV programs, be aware that the following types of programs may be blocked: programs broadcast from another country, emergency broadcasts, political programs, sports, news, public service announcements, religious programs and weather.	
Change Password	Select to change your password.	
	✍ You need your password for any future access into the Parental Lock settings. If you lose your password, see “Lost password” on page 50.	
Select Country	U.S.A.	Select to use U.S.A. ratings (see below).
	Canada	Select to use Canadian ratings (see page 42).

US Models: Selecting Custom Parental Lock Rating Options

To select custom rating options for the U.S., select U.S.A. in the Select Country setting (see above).

Option	Description	
Movie Rating	G	All children and general audience.
	PG	Parental guidance suggested.
	PG-13	Parental guidance for children under 13.
	R	Restricted viewing, parental guidance is suggested for children under 17.
	NC-17 and X	No one 17 or under allowed.
TV Rating *Block programs by their rating, content or both*	Age-Based Ratings	
	TV-Y	All children.
	TV-Y7	Directed to children age 7 and older.
	TV-G	General audience.
	TV-PG	Parental guidance suggested.
	TV-14	Parents strongly cautioned.
	TV-MA	Mature audience only.
	Content-Based Ratings	
	FV	Fantasy violence.
	D	Suggestive dialogue.
	L	Strong language.
	S	Sexual situations.
	V	Violence.
	✍ To ensure maximum blocking capability, set the Age-Based Ratings.	

(Continued)

Canadian Models: Selecting Custom Parental Lock Rating Options

To select custom rating options for Canada, select Canada in the Select Country setting (see page 41).

Option	*Description*	
English Rating	C	All children.
	C8+	Children 8 years and older.
	G	General programming.
	PG	Parental guidance.
	14+	Viewers 14 and older.
	18+	Adult programming.
French Rating	G	General programming.
	8 ans+	Not recommended for young children.
	13 ans+	Not recommended for ages under 13.
	16 ans+	Not recommended for ages under 16.
	18 ans+	Programming restricted to adults.
U.S.A. Rating	See TV Rating for “US Models” on page 41.	

Viewing Blocked Programs

You can view blocked programs by entering the password. Press ENT when tuned to a blocked program, then enter the password. This temporarily turns the parental control feature off. To reactivate the Parental Lock settings, turn off the TV. When the TV is turned on again, your Parental Lock settings are reactivated.

Setup Settings

Option	Description	
Caption Vision (CC)	Allows you to select from several closed-caption modes.	
	On	Caption Vision (CC) is turned on.
	Off	Caption Vision (CC) is turned off.
	Program	Allows you to set basic and advanced Caption Vision (CC) options. See "Programming Caption Vision (CC)" on page 45.
Info Banner	Set to On or Off. When On, displays the program name and the program information (if the	

Option	*Description*	
Clock/Timers	Sleep	Set the time in minutes (Off, 15 minutes, 30 minutes, 45 minutes, 60 minutes, 90 minutes or 120 minutes) that you want the TV to remain on before shutting off automatically.
	Timer 1 Timer 2	You can use the timers to turn the TV on, set the duration time the TV will remain on, and tune to a specific channel at two scheduled times. Timer 1 and Timer 2 will not be available until you set the Current Time. **1** Press ↑/↓ to highlight Timer 1 or Timer 2. To set the timer, press →. ✍ To go directly to programming Timer 1 or 2, press ⊕ instead of pressing →. **2** Press ↑/↓ to highlight one of the following options, then press ⊕. Program: Select to set the timer by day, hour, minute, AM/PM, Duration, and Channel. Off: Select to turn off the timer. (Your previous settings are saved.) **3** If you selected Program in step 2, press ↑ and ↓ to set the day(s), hour, minute, AM/PM, duration, and channel number. Press ⊕ or press → to confirm each setting and move to the next setting. Press ← to go back to the previous setting. **4** Press MENU to exit Settings.
	Current Time	You can set the current time. **1** Press ⊕ to select Current Time. **2** Press ↑ and ↓ to set the current time (day, hour, minute, and AM/PM). Press ⊕ (or press →) to confirm each setting and move to the next setting. Press ← to go back the previous setting. **3** Press MENU to exit Settings.
Language	Select to display all on-screen settings in your language of choice: English, Español, Français.	
Menu Color	Enables you to select a specific color for the on-screen settings.	
Power Saving	Select to reduce the power consumption by adjusting the backlight brightness. This also enhances the black level. Select from Off, Low, High and Picture Off.	
Logo Illumination	Select to illuminate the Sony logo on the front panel of the TV. Select On or Off.	
Light Sensor	Select On to enable the automatic picture (screen) brightness control. The light sensor measures the room brightness which allows the TV to automatically adjust the backlight brightness based on the picture settings and the ambient room light conditions. ✍ Be sure not to put anything around the sensor, as its function may be affected. See page 29 for information about the sensor. ✍ In low light the range of the backlight control is reduced when Light Sensor is set to On.	

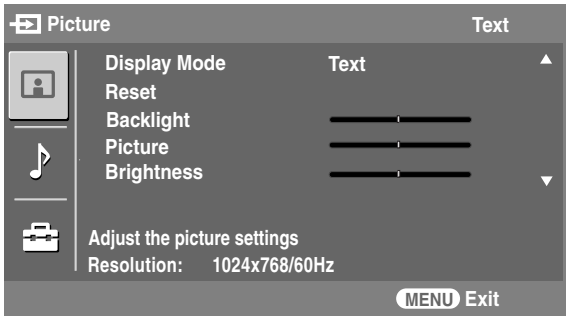
Option	Description	
Motion Enhancer	On	Smooths motion images.
	Off	Selects to turn off Motion Enhancer.
CineMotion	Select Auto to optimize the screen display automatically detecting film content and applying a reverse 3-2 pulldown process. Moving pictures will appear clearer and more natural looking. Select Off to disable the detection.	
	✍ CineMotion is only available when you are watching 480i sources, except when the Freeze feature is in use.	
Product Information	Select to display the equipment information of your TV.	

Programming Caption Vision (CC)

If you selected the Program option under Caption Vision (CC) (see page 43), you can change the following settings:

Option	Description		
Basic	Allows you to select basic analog (EIA-608) closed caption options.		
	CC1, CC2, CC3, CC4	Displays a printed version of the dialog or sound effects of a program. (Should be set to CC1 for most programs.)	
	Text1, Text2, Text3, Text4	Displays network/station information presented using either half or the whole screen (if available).	
Digital CC	Allows you to set digital closed captioning to Basic (digital EIA-608) or Advanced (digital EIA-708).		
Advanced	Allows you to select advanced digital (EIA-708) closed caption options. Select from the available options.		
Advanced Settings	Allows you to make additional settings for digital (EIA-708) closed caption options. Select from As Broadcast, Small Text, Large Text and Custom.		
	Custom...	Allows you to customize the following settings:	
		Character Size	Small, Standard, Large
		Character Style	Style 1-7
		Character Color	Color 1-8
		Character Opacity	Solid, Translucent
		Edge Color	Color 1-8
		Edge Type	None, Raised, Depressed, Outline, Left Shadow, Right Shadow
		Background Color	None, Color 1-8
		Background Opacity	Solid, Translucent
		Window Color	None, Color 1-8
		Window Opacity	Solid, Translucent

PC Settings



To display the PC settings, see “Navigating Through Settings” (see page 31).

✍ Press TV/VIDEO to switch to another input.

✍ When you connect a PC to your TV for the first time, you may need to adjust the screen display. In such cases, perform Auto Adjustment or manually adjust Phase, Pitch, Horizontal Center, or Vertical Center in Others.

Option	*Description*		
Picture	Display Mode	Video	Select to view video images.
		Text	Select to view text, charts or tables.
	Reset	Reset the current settings to the default values.	
	Backlight	Adjust to brighten or darken the backlight.	
	Picture	Adjust to increase or decrease picture contrast.	
	Brightness	Adjust to brighten or darken the picture.	
	Color Temp. *White adjustment*	Cool	Select to give the white colors a bluish tint.
		Neutral	Select to give the white colors a neutral tint.
		Warm 1,2	Select to give the white colors a reddish tint. Warm 2 gives a redder tint than Warm 1.
Sound	Sound Mode	Dynamic	Select to enhance treble and bass.
		Standard	Provides standard sound. Recommended for home entertainment.
		Custom	Provides a flat response. Sound quality as customized on the connected PC is maintained in the TV sound.

Option	Description		
Others	Auto Adjustment	Select to automatically adjust the display position, Phase and Pitch of the picture when the TV receives an input signal from the connected PC. Note that Auto Adjustment may not work well with certain input signals. In such cases, manually adjust the options below.	
	Reset	Resets the current settings to the default value.	
	Phase	Adjust after Pitch to fine tune overall sharpness.	
	Pitch	Adjust uneven sharpness on screen.	
		✍ For the PC Input Signal Reference Chart, see page 51.	
	Horizontal Center	Allows you to move the position of the picture left and right. Press ←/→ and press ⊕ to adjust.	
	Vertical Center	Allows you to move the position of the picture up and down. Press ←/→ and press ⊕ to adjust.	
	Wide Mode	Normal	Select to display in the original image size.
		Full 1	Select to enlarge the picture to fill the display area, keeping its original aspect ratio.
		Full 2	Select to enlarge the picture to fill the display area.
	Power Management	On	Select to automatically switch to the standby mode when there is no signal input for 30 seconds.
		Off	Select to turn off Power Management.
		✍ Power Management is not VESA-compliant.	

Troubleshooting

If you have additional questions, service needs, or require technical assistance related to the use of your Sony TV, please visit our website or call one of the following numbers:
http://www.sony.com/TVsupport
1-800-222-SONY(7669) for US Residents
1-877-899-SONY(7669) for Canadian Residents

Problem	Possible Remedies
No picture.	
No picture.	❑ Check Power Saving settings (page 44).
Cannot receive any channels.	❑ Make sure the power cord is connected securely. ❑ Turn on the power of the TV. ❑ Check antenna/cable connections.
TV is locked to one channel.	❑ Perform Auto Program to add receivable channels that are not present in the TV's memory (page 39).
Cannot receive or select channels.	❑ Perform Auto Program to add receivable channels that are not present in the TV's memory (page 39).
The TV turns off automatically.	❑ Check if the Sleep is activated, or confirm the Duration setting of Timer. (page 44). ❑ If the temperature is too high, the TV may also turn off after a warning message is displayed. ❑ Check Power Management in the PC Settings (page 47).
No picture from some video sources.	❑ Check the connection between the optional video equipment and the TV. ❑ Press TV/VIDEO on the remote control (page 20). ❑ Press MENU on the remote control. Select your desired input from the External Inputs list.
Poor picture.	
Double images or ghosts.	❑ Check antenna/cable connections. ❑ Check the antenna location and direction.
Only snow and noise appear on the screen.	❑ Check if the antenna is broken or bent. ❑ Check if the antenna has reached the end of its serviceable life. (3-5 years in normal use, 1-2 years at the seaside.)
Dotted lines or stripes.	❑ Keep the TV away from noise sources such as cars, motorcycles, or hair-dryers. ❑ If using 300 ohm twin lead, move the excess lead away from the TV or try using 75 ohm coaxial cable instead.
No color/Dark picture/Color is not correct/The picture is too bright.	❑ Press PICTURE to select the desired picture mode (page 23). ❑ Adjust the Picture Mode options in the Picture settings (page 32). ❑ If you set the Power Saving mode to Low or High, it will enhance the black level.
Noisy picture.	❑ Make sure that the antenna is connected using the supplied 75-ohm coaxial cable. ❑ Keep the antenna cable away from other connecting cords. ❑ To avoid TV interference, make sure to use an undamaged antenna cable.

Problem	Possible Remedies
No sound/Noisy sound.	
Good picture, no sound.	❑ Check the volume control. ❑ Press MUTING or VOL + so that "Muting" disappears from the screen (page 22). ❑ Disconnect your headphones. ❑ Set Speaker to On in the Sound settings (page 36). If it is set to Off, sound is not output from the TV's speakers regardless of the TV's volume control.
Audio noise.	❑ Make sure that the antenna is connected using the supplied 75-ohm coaxial cable. ❑ Keep the antenna cable away from other connecting cords. ❑ To avoid TV interference, make sure to use an undamaged antenna cable.
There is a whirring sound.	❑ This is the sound of internal fans of the TV. It is not a malfunction.
Wide Mode changes automatically.	❑ The current Wide Mode setting is automatically replaced with the 4:3 Default setting when you change the channel or video input, if 4:3 Default in the Screen settings is set to other than Off. If you want to lock in the Wide Mode selected with the WIDE button, set 4:3 Default to Off in the Screen settings (page 38). ❑ Check the Auto Wide option in the Screen settings (page 37).
"Black box" on screen.	❑ You have selected a text option in the Caption Vision (CC) feature in the Setup setting and no text is available (see pages 43 and 45 to reset Setup selections). To turn off this feature, set the Caption Vision (CC) option to Off. If you are trying to select closed captioning, select CC1 instead of Text1-4.
Black bands appear at the top and bottom of the screen.	❑ Some wide screen programs are filmed in aspect ratios that are greater than 16:9 (this is especially common with theatrical releases). Your TV will show these programs with black bands at the top and bottom of the screen. For more details, check the documentation that came with your DVD (or contact your program provider).
Certain programs on DVD or other digital sources display a loss of detail, especially during fast-motion or dark scenes.	❑ The compression used by certain digital broadcasts and DVDs may cause your TV's screen to display less detail than usual, or cause artifacts (small blocks or dots, pixelations) to appear on your screen. This is due to your TV's large screen and ability to show very fine detail, and is normal for certain digitally recorded programs. Adjust the Reality/Clarity in the DRC Palette setting (page 33) to optimize the picture while viewing these sources.
Remote control does not operate.	❑ Check the polarity of the batteries or replace the batteries. ❑ Point the remote control at the remote control sensor of the TV. ❑ Fluorescent/fluorescent lamps can interfere with your remote control operation; try turning off the Fluorescent/fluorescent lamps. ❑ Keep the remote control sensor area clear from obstacles.
Cannot change channels with the remote control.	❑ If you are using the TV to change channels, first press TV (FUNCTION) once, and the TV indicator lights up. ❑ If you are using another device to change channels, be sure you have not inadvertently switched your TV from the channel 3 or 4 setting. ❑ If you are using another device to change channels, be sure to press FUNCTION for that device. For example, if you are using your cable box to change channels, be sure to press SAT/CABLE (FUNCTION) once, and the SAT/CABLE indicator lights up.
Remote control does not operate non-Sony video equipment.	❑ If you replaced the batteries to the remote recently, the code numbers for the video equipment may need to be reset. ❑ There may be more than one code for the equipment that you are attempting to operate. ❑ There is a possibility that some non-Sony equipment cannot be operated by your Sony TV remote. You may need to use the equipment's original remote control.

(Continued)

Problem	*Possible Remedies*
Some digital cable channels are not being displayed.	❑ Certain cable companies have limitations on the broadcast of digital cable channels. Check with your cable company for more information. ❑ The digital cable channel may be set to Hidden in the Show/Hide Channels setting (page 39).
Lost password.	❑ Select the Parental Lock settings on the settings screen, then enter the following master password: 4357. The master password clears your previous password and allows you to enter a new password (page 40).
How to reset the TV to factory settings.	❑ Turn on the TV. While holding down the ▲ button on the remote control, press the POWER button on the TV. (The TV will turn itself off, then back on again.) Release the ▲ button. WARNING: This operation will clear all of your customized settings including Parental Lock setting.

PC Input Signal Reference Chart

Signals	Resolution Horizontal (Pixel)	×	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	**640**	×	**480**	**31.5**	**60**	**VGA**
	640	×	480	37.5	75	VESA
	720	×	400	31.5	70	VGA-T
SVGA	**800**	×	**600**	**37.9**	**60**	**VESA Guidelines**
	800	×	600	46.9	75	VESA
XGA	**1024**	×	**768**	**48.4**	**60**	**VESA Guidelines**
	1024	×	768	56.5	70	VESA
	1024	×	768	60.0	75	VESA
WXGA	**1280**	×	**768**	**47.4**	**60**	**VESA**
	1280	×	**768**	**47.8**	**60**	**VESA**
	1280	×	768	60.3	75	
	1360	×	**768**	**47.7**	**60**	**VESA**
SXGA	**1280**	×	**1024**	**64.0**	**60**	**VESA**
	1280	×	1024	80.0	75	VESA
HDTV	**1920**	×	**1080**	**67.5**	**60**	

✍ This TV's PC input does not support Sync on Green or Composite Sync.

✍ This TV's PC input does not support interlaced signals.

✍ For the best picture quality, it is recommended to use the signals (boldfaced) in the above chart with a 60Hz vertical frequency from a personal computer. In plug and play, signals with a 60Hz vertical frequency will be selected automatically.

Specifications

Television system:

NTSC	American TV standard
ATSC (8VSB terrestrial)	ATSC compliant 8VSB
QAM on cable	ANSI/SCTE 07 2000 (Does not include CableCARD functionality)

Channel coverage:

Terrestrial (analog)	2-69
Cable (analog)	1-125
Terrestrial (digital)	2-69
Cable (digital)	1-135

Antenna: 75-ohm external terminal for VHF/UHF

Screen size (measured diagonally):
70 inches

Panel system:
LCD (Liquid Crystal Display) Panel

Display resolution (horizontal × vertical):
1,920 dots × 1,080 lines

VIDEO IN 1/2/4:
S VIDEO (4-pin mini DIN) (VIDEO 1 only):
Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75 ohms
VIDEO: 1 Vp-p, 75 ohms unbalanced, sync negative
AUDIO: 500 mVrms (100% modulation)
Impedance: 47 kilohms

HD/DVD IN 5/6:
$Y P_B P_R$ (Component Video):
Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative
P_B: 0.7 Vp-p, 75 ohms
P_R: 0.7 Vp-p, 75 ohms
Signal format: 480i, 480p, 720p, 1080i, 1080p
AUDIO: 500 mVrms (100% modulation)
Impedance: 47 kilohms

HDMI IN 3/7/8:
HDMI: Video: 480i, 480p, 720p, 1080i, 1080p (except for HDMI IN 3)
Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24 bits
AUDIO (for HDMI IN 8):
500 mVrms (100% modulation)
Impedance: 47 kilohms

AUDIO OUT:
500 mVrms (100% modulation) (Fixed)
1 Vrms at the maximum volume setting (Variable)

DIGITAL OUT (OPTICAL):
Optical Digital Audio Output (PCM/Dolby digital)

PC IN 9:
D-sub 15-pin, analog RGB, 0.7 Vp-p, 75 ohms, positive
See the PC Input Signal Reference Chart on page 51

PC AUDIO INPUT:
Stereo mini jack, 500 mVrms (100% modulation), Impedance: 47 kilohms

Headphones:
Stereo mini jack
Impedance: 16 ohms

Speaker:
Full Range : 50 × 105 mm (2 × 4 $^1/_4$ inches) (4)
Tweeter : 40 mm (1 $^5/_8$ inches) (2)

Speaker output:
11W + 11W

Power requirement:
120 V AC, 60 Hz

Power consumption:
In use: 650W
In standby: Less than 0.5W

Dimensions (W/H/D):
(with stand) 1842 × 1131 × 422 mm (72 $^5/_8$ × 44 $^5/_8$ × 16 $^5/_8$ inches)
(without stand) 1842 × 1073 × 150 mm (72 $^5/_8$ × 42 $^1/_4$ × 6 inches)

Mass:
(with stand) 93.0 kg (205 lb.)
(without stand) 80.0 kg (176 lb.)

Supplied accessories:
Remote control
RM-YD013 (1)
Size AA batteries (2)
75-ohm coaxial cable (1)
AC power cord (1)
AC plug holder (1)
HD15-HD15 cable (1)
Support belt (1), securing screw (1) and wood screw (1)
Guide sticker (L×2, R×2)
Operating Instructions (1)
Quick Setup Guide (1)
Installing the Wall-Mount Bracket (1)
Warranty Card (1)
Online Registration Card (U.S.A. only) (1)

Optional accessories:
Headphones plug adapter
Connecting cables
Wall-Mount Bracket: SU-WL500

✍ The availability of optional accessories depends on its stock.

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For Your Convenience

Please contact Sony directly if you:

- Have questions on the use of your television after reading your manual
- Experience difficulty operating your television

Contact Sony Customer Support at:

http://www.sony.com/tvsupport

or to speak with a support representative:

United States
1-800-222-SONY (7669)

Canada
1-877-899-SONY (7669)

Sony will work to resolve your questions more quickly than your retailer or place of purchase.

Please Do Not Return the Product to the Store

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